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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
RIES, LAURIE ANNE	

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2176	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/692,453

Applicant(s)

BEILINSON ET AL.

Examiner

Laurie Ries

Art Unit

2176

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7, 9, 14-16, 18, 20, 24-26, 28, 30, 34-36, 38, 40, 42 and 50-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7, 9, 14-16, 18, 20, 24-26, 28, 30, 34-36, 38, 40, 42 and 50-54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to communications: Response to Election Requirement, filed 1 October 2007, to the Original Application, filed 23 October 2003.
2. Claims 1-5, 7, 9, 14-16, 18, 20, 24-26, 28, 30, 34-36, 38, 40, 42, and 50-54 are pending. Claims 1, 14, 24, 34, 42, and 51 are independent claims.

Election/Restrictions

3. Applicant's election of Claims 1-5, 7, 9, 14-16, 18, 20, 24-26, 28, 30, 34-36, 38, 40, 42, and 50-54 in the reply filed on 1 October 2007 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 14-16, 18, and 20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Independent claim 14 is directed to a "computer-readable medium" that does not fall within a statutory category of invention, since the Instant Specification, at pages 8-9, paragraph 0030, describes the computer readable medium as including both "computer storage media" and "communication media". The Instant Specification, at page 9, paragraph 0031, further describes a "communications media" as including a carrier wave or modulated data signal. A carrier wave or modulated data signal has no physical structure and does not itself perform any useful, concrete and tangible result. As such, claim 14 is ineligible for patent protection because it does not fall within any of the four statutory categories of invention as defined by 35 U.S.C. 101.

Claims 15-16, 18, and 20 are dependent upon claim 14 and do not add any limitations that would render the claim statutory under 35 USC 101. Therefore, these claims are likewise rejected.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-5, 7, 9, 14-16, 18, 20, 24-26, 28, 30, 34-36, 38, 40, 42, and 50-52, and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilkins (U.S. Patent 6,904,185 B1) in view of Carau (U.S. Publication 2003/0210335 A1).

As per independent claim 1, Wilkins teaches a method for use on a computing device including linking a digital object to a digital negative (See Wilkins, Column 7, lines 61-67, Column 8, lines 1-10, and Column 6, lines 20-33).

Wilkins also teaches responsive to a save operation associated with the digital object, generating a new digital object (See Wilkins, Column 4, lines 26-35).

Wilkins also teaches bi-directionally connecting the digital negative to the new digital object (See Wilkins, Column 4, lines 54-60).

Wilkins does not teach expressly creating the digital negative from the digital object, and while Wilkins teaches an edit list that associates the digital negative to new digital objects, Wilkins does not teach expressly that, responsive to a revert operation

associated with the new digital object, replacing content of the new digital object with content of the digital negative.

Carau teaches creating a digital negative (See Carau, Page 1, paragraph 0007).

Carau also teaches, responsive to an undo or revert operation, reversing the edits and restoring the original capture image, or digital negative (See Carau, Page 1, paragraph 0008, Page 3, paragraph 00035, and Page 4, paragraph 0039).

Wilkins and Carau are analogous art because they are from the same field of endeavor of manipulating digital images.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the creation of a digital image and the undo operation to revert back to the original digital image, or digital negative, of Carau with the method of linking digital objects to a digital negative of Wilkins. The motivation for doing so would have been to allow the user to maintain and preserve the original digital negative should the edits made to the image become corrupted or otherwise damage the quality of the original image.

Therefore, it would have been obvious to combine Carau with Wilkins for the benefit of allowing the user to maintain and preserve the original digital negative should the edits made to the image become corrupted or otherwise damage the quality of the original image to obtain the invention as specified in claim 1.

As per dependent claim 2, Wilkins and Carau teach the limitations of claim 1 as described above. Wilkins also teaches that the digital object is a digital image (See Wilkins, Figure 2C, element 302).

As per dependent claim 3, Wilkins and Carau teach the limitations of claim 1 as described above. Wilkins also teaches that the content of the new digital object and the content of the digital negative is pixel data (See Wilkins, Column 4, lines 39-45).

As per dependent claim 4, Wilkins and Carau teach the limitations of claim 1 as described above. Wilkins also teaches that the linking is automatically performed by an image acquisition interface responsive to acquiring the digital object (See Wilkins, Figure 2a, element 212, and Column 10, lines 22-48). Carau also teaches that the creating of the digital negative is performed by an image acquisition interface responsive to acquiring the digital object (See Carau, Page 4, paragraph 0047). Wilkins and Carau are analogous art because they are from the same field of endeavor of manipulating digital images. At the time of the invention it would have been obvious to one of ordinary skill in the art to include the creation of a digital image by an image acquisition interface responsive to acquiring the digital object of Carau with the method of linking digital objects to a digital negative of Wilkins. The motivation for doing so would have been to enable the user to create a digital negative that may be stored and manipulated as determined by the user. Therefore, it would have been obvious to combine Carau with Wilkins and Carau for the benefit of enabling the user to create a digital negative that may be stored and manipulated as determined by the user to obtain the invention as specified in claim 4.

As per dependent claim 5, Wilkins and Carau teach the limitations of claim 1 as described above. Wilkins also teaches that the linking is automatically performed responsive to a first edit to the digital object (See Wilkins, Column 4, lines 21-30), and

Carau also teaches that the creating is automatically performed responsive to a first edit to the digital object (See Carau, Page 3, paragraph 0031). Wilkins and Carau are analogous art because they are from the same field of endeavor of manipulating digital images. At the time of the invention it would have been obvious to one of ordinary skill in the art to include the automatic creation performed responsive to a first edit to the digital object of Carau with the method of linking digital objects to a digital negative of Wilkins. The motivation for doing so would have been to allow a viewing device, such as a personal computer, to "undo" the edits by invoking the undo edit description if the user desired to view the original image (See Carau, Page 3, paragraph 0031).

Therefore, it would have been obvious to combine Carau with Wilkins and Carau for the benefit of allowing a viewing device, such as a personal computer, to "undo" the edits by invoking the undo edit description if the user desired to view the original image, to obtain the invention as specified in claim 5.

As per dependent claim 7, Wilkins and Carau teach the limitations of claim 1 as described above. Wilkins also teaches that the linking further includes indicating in the digital object a substantially unique identifier of the digital negative; and inserting a substantially unique identifier of the digital object into the digital negative (See Wilkins, Column 6, lines 48-64).

As per dependent claim 9, Wilkins and Carau teach the limitations of claim 1 as described above. Wilkins also teaches that the save operation is an implicit save operation associated with one or more edits to content corresponding to the digital object, such as through an edit list, wherein the new digital object comprises the one or

more edits, and wherein responsive to the save operation the method further comprises: replacing the digital object with the new digital object to create a linear versioning history with respect to the digital object; and removing a link referencing the digital object from the digital negative (See Wilkins, Column 4, lines 64-67, and Column 5, lines 1-33).

As per independent claim 14, Wilkins teaches a computer-readable medium comprising computer-executable instructions (See Wilkins, Figure 2). Independent claim 14 additionally incorporates substantially similar subject matter as that of independent claim 1 above, and is additionally rejected along the same rationale as used in the rejection of claim 1.

As per dependent claim 15, Wilkins and Carau teach the limitations of claim 14 as described above. Claim 15 additionally incorporates substantially similar subject matter as that of claim 4 above, and is additionally rejected along the same rationale as used in the rejection of claim 4.

As per dependent claim 16, Wilkins and Carau teach the limitations of claim 14 as described above. Claim 16 additionally incorporates substantially similar subject matter as that of claim 5 above, and is additionally rejected along the same rationale as used in the rejection of claim 5.

As per dependent claim 18, Wilkins and Carau teach the limitations of claim 14 as described above. Wilkins also teaches indicating in the digital image a substantially unique identifier of the digital negative and inserting a substantially unique identifier of the digital image into the digital negative (See Wilkins, Column 6, lines 48-64).

As per dependent claim 20, Wilkins and Carau teach the limitations of claim 14 as described above. Claim 20 additionally incorporates substantially similar subject matter as that of claim 9 above, and is additionally rejected along the same rationale as used in the rejection of claim 9.

As per independent claim 24, Wilkins teaches a computing device including a processor (See Wilkins, Figure 8, element 802), and a memory coupled to the processor, the memory comprising computer-readable medium comprising computer-program instructions executable by the processor (See Wilkins, Figure 8, element s 804 and 806). Independent claim 24 additionally incorporates substantially similar subject matter as that of independent claim 1 above, and is additionally rejected along the same rationale as used in the rejection of claim 1.

As per dependent claim 25, Wilkins and Carau teach the limitations of claim 24 as described above. Claim 25 additionally incorporates substantially similar subject matter as that of claim 4 above, and is additionally rejected along the same rationale as used in the rejection of claim 4.

As per dependent claim 26, Wilkins and Carau teach the limitations of claim 24 as described above. Claim 26 additionally incorporates substantially similar subject matter as that of claim 5 above, and is additionally rejected along the same rationale as used in the rejection of claim 5.

As per dependent claim 28, Wilkins and Carau teach the limitations of claim 24 as described above. Claim 28 additionally incorporates substantially similar subject

matter as that of claim 7 above, and is additionally rejected along the same rationale as used in the rejection of claim 7.

As per dependent claim 30, Wilkins and Carau teach the limitations of claim 24 as described above. Claim 30 additionally incorporates substantially similar subject matter as that of claim 9 above, and is additionally rejected along the same rationale as used in the rejection of claim 9.

As per independent claim 34, Wilkins teaches a computing device (See Wilkins, Figure 1). Independent claim 34 additionally incorporates substantially similar subject matter as that of independent claim 1 above, and is additionally rejected along the same rationale as used in the rejection of claim 1.

As per dependent claim 35, Wilkins and Carau teach the limitations of claim 34 as described above. Claim 35 additionally incorporates substantially similar subject matter as that of claim 4 above, and is additionally rejected along the same rationale as used in the rejection of claim 4.

As per dependent claim 36, Wilkins and Carau teach the limitations of claim 34 as described above. Claim 36 additionally incorporates substantially similar subject matter as that of claim 5 above, and is additionally rejected along the same rationale as used in the rejection of claim 5.

As per dependent claim 38, Wilkins and Carau teach the limitations of claim 34 as described above. Claim 38 additionally incorporates substantially similar subject matter as that of claim 1 above, and is additionally rejected along the same rationale as used in the rejection of claim 1.

As per dependent claim 40, Wilkins and Carau teach the limitations of claim 34 as described above. Claim 40 additionally incorporates substantially similar subject matter as that of claim 9 above, and is additionally rejected along the same rationale as used in the rejection of claim 9.

As per independent claim 42, Wilkins teaches a method for presenting a user interface including presenting an interface for a user manage digital negatives across single or multiple linear picture version history progressions (See Wilkins, Column 8, lines 16-25, Column 4, lines 64-67, and Column 5, lines 1-33).

Wilkins also teaches receiving, via the interface, an indication of an implicit save operation with respect to a digital image (See Wilkins, Column 4, lines 26-35).

Wilkins also teaches evaluating whether the digital image has a corresponding digital negative (See Wilkins, Column 8, lines 43-62).

Wilkins also teaches that, responsive to determining that the digital image does not have a corresponding digital negative: generating a digital negative for the digital image such that the digital negative comprises substantially same pixel content as the digital image (See Wilkins, Abstract).

Wilkins also teaches linking the digital image to the digital negative (See Wilkins, Column 7, lines 61-67, Column 8, lines 1-10, and Column 6, lines 20-33).

Wilkins does not teach expressly creating the digital negative from the digital object.

Carau teaches creating a digital negative (See Carau, Page 1, paragraph 0007).

Wilkins and Carau are analogous art because they are from the same field of endeavor of manipulating digital images.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the creation of a digital image of Carau with the interface for a user to manage digital negatives of Wilkins. The motivation for doing so would have been to enable the user to create a digital negative that may be stored and manipulated as determined by the user.

Therefore, it would have been obvious to combine Carau with Wilkins for the benefit of enabling the user to create a digital negative that may be stored and manipulated as determined by the user to obtain the invention as specified in claim 42.

As per dependent claim 50, Wilkins and Carau teach the limitations of claim 42 as described above. Wilkins also teaches receiving, via the interface, a request from the user to create a new digital image from a first digital negative stored on a data storage device associated with a backup engine; and responsive to receiving the request, generating the new digital image and a second digital negative from the first digital negative (See Wilkins, Abstract, and Column 14, lines 27-55).

As per independent claim 51, Wilkins teaches a method for interfacing with a digital negative management application including causing a digital negative to be linked to a digital image (See Wilkins, Column 7, lines 61-67, Column 8, lines 1-10, and Column 6, lines 20-33).

Wilkins also teaches that the digital negative to be generated includes pixel content of the digital image at the time of the request to create (See Wilkins, Column 4, lines 39-45).

Wilkins does not teach expressly issuing a request to create the digital negative from the digital object, and while Wilkins teaches an edit list that associates the digital negative to new digital objects, Wilkins does not teach expressly communicating a request to revert pixel contents of a version of the digital image to the pixel content of the digital negative.

Carau teaches creating a digital negative (See Carau, Page 1, paragraph 0007).

Carau also teaches, responsive to an undo or revert operation, reversing the edits and restoring the original capture image, or digital negative (See Carau, Page 1, paragraph 0008, Page 3, paragraph 00035, and Page 4, paragraph 0039).

Wilkins and Carau are analogous art because they are from the same field of endeavor of manipulating digital images.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the creation of a digital image and the undo operation to revert back to the original digital image, or digital negative, of Carau with the method of linking digital objects to a digital negative of Wilkins. The motivation for doing so would have been to allow the user to maintain and preserve the original digital negative should the edits made to the image become corrupted or otherwise damage the quality of the original image.

Therefore, it would have been obvious to combine Carau with Wilkins for the benefit of allowing the user to maintain and preserve the original digital negative should the edits made to the image become corrupted or otherwise damage the quality of the original image to obtain the invention as specified in claim 51.

As per dependent claim 52, Wilkins and Carau teach the limitations of claim 51 as described above. Wilkins also teaches that the request is issued responsive to acquiring the digital image or detecting first edits to pixel content of the digital image for the first time (See Wilkins, Column 4, lines 64-67, and Column 5, lines 1-33).

As per dependent claim 54, Wilkins and Carau teach the limitations of claim 51 as described above. Carau also teaches causing the digital negative to be stored in a backup engine staging area for backup to an external data storage device (See Carau, Page 1, paragraph 0008). Wilkins and Carau are analogous art because they are from the same field of endeavor of manipulating digital images. At the time of the invention it would have been obvious to one of ordinary skill in the art to include the storage of the digital negative in a backup engine staging area of Carau with the method for interfacing with a digital negative management application of Wilkins and Carau. The motivation for doing so would have been to allow a viewing device, such as a personal computer, to "undo" the edits by invoking the undo edit description if the user desired to view the original image (See Carau, Page 3, paragraph 0031). Therefore, it would have been obvious to combine Carau with Wilkins and Carau for the benefit of allowing a viewing device, such as a personal computer, to "undo" the edits by invoking the undo edit

description if the user desired to view the original image, to obtain the invention as specified in claim 54.

6. Claims 53 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wilkins (U.S. Patent 6,904,185 B1) in view of Carau (U.S. Publication 2003/0210335 A1) as applied to claim 51 above, and further in view of Yoda (U.S. Publication 2003/0059202 A1).

As per dependent claim 53, Wilkins and Carau teach the limitations of claim 51 as described above. Carau also teaches causing the digital negative to be backed up by a backup engine to an external data storage device (See Carau, Page 1, paragraph 0008). Wilkins and Carau do not teach expressly that the digital negative is removed from system memory. Yoda teaches deleting an image or set of images from storage (See Yoda, Page 7, paragraph 0094). Wilkins, Carau and Yoda are analogous art because they are from the same field of endeavor of manipulating digital images. At the time of the invention it would have been obvious to one of ordinary skill in the art to include the deletion of an original image from storage of Yoda with the digital negative management application of Wilkins and Carau. The motivation for doing so would have been to release storage space such that additional images may be captured and saved. Therefore, it would have been obvious to combine Yoda with Wilkins and Carau for the

benefit of releasing storage space such that additional images may be captured and saved to obtain the invention as specified in claim 53.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Reinhard discloses photographic tone reproduction for digital images.
- Crosby (U.S. Patent 6,870,547 B1) discloses a method and apparatus for rendering a low-resolution thumbnail image suitable for a low resolution display having a reference back to an original digital negative and an edit list of operations.
- Wood (U.S. Patent 6,732,162 B1) discloses a method of providing preprocessed images for a plurality of Internet web sites.
- Matsumoto (U.S. Patent 6,647,125 B2) discloses an image processing apparatus, method and recording medium therefor.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laurie Ries whose telephone number is (571) 272-

4095. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Hutton, can be reached at (571) 272-4137.

9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Laurie Ries
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Art Unit 2176